DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Mohan

(US Patent No. 6,434,257).

Regarding to claim 1, Mohan discloses an apparatus to determine prices of

products priced by weight comprising:

a camera for detecting and identifying a product by type [...camera 120, see

figure 1];

means for determining a volume of the product based on image information from

the camera [...calculating device 140, and weighting device 170; see col. 6, lines 13-19;

col. 17, lines 34-38; lines 50-57 and figures 1, 15 -17];

a database of lookup tables of densities of a plurality of products; and [...for

example database 270; col. 16, lines 1-13; figures 1-2, and 13];

a computer terminal which receives product type and volume of the product

information and accesses the database to determine a density for the product, the

computer terminal computing a weight of the product as a function of volume and

density of the product and then computing a price of the product as a function of

price/weight ratio [...computer 140 is connected to a weighing device 170 that

determines the weight/volume (density) and the price of the product; see col. 17, lines

34-50; col. 18, lines 41-63 and figures 1, 15 and 17].

Regarding to claim 2, Mohan discloses wherein the apparatus is part of a

checkout station in a retail store [see col.1, lines 60-64; col. 6, lines 35-36; col. 19, lines

52-57 and figure 1].

Regarding to claim 3, Mohan discloses further comprising a display connected to

the computer which displays the calculated price of the product [...out put device 160,

and display device 1710; see col. 6, lines 37-40; col. 18, lines 50-54 and figures 1 and

17].

Regarding to claim 4, Mohan discloses wherein the computer generates a

running total of prices for a plurality of products as part of a single transaction and

displays the running total on the display [see col. 18, lines 50-54, col. 19, lines 52-56

and figures 1 and 17].

Regarding to claim 5, Mohan discloses further comprising a connected to the

computer which prints the running total [see col. 18, lines 50-54 and figure 17].

Regarding to claim 6, Mohan discloses wherein the computer terminal

categorizes the product within one of a plurality of weight ranges, the price of the

product being a function of the weight ranges [see col. 17, lines 34-49, col. 18, lines 55-

58; figures 15 and 17].

Regarding to claim 7, Mohan discloses a method of determining a product weight
and calculating price comprising the steps of:

detecting a product with a camera [figure 1, camera 120];

identifying the product by type [see col. 4, lines 32-35; lines 38-41, lines 65-67];

determining a volume of the product from an image of the product [...determine

weight and size of an object; see col. 1, lines 48-53, col. 17, lines 34-38];

accessing a database of densities of a plurality of products and determining a

density for the detected and identified product [...for example memory storage 144 and

database 270; determine the weight/volume (density); col. 17, lines 34-50; col. 20, lines

5-10; figures 1-2 and 15];

calculating a weight of the product as a function of volume and density 0of the

product [see col. 17, lines 34-50, col. 20, lines 5-10 and figure 15].

calculating a price of the product as a function of the calculated weight

and price/weight ratio [see col. 18, lines 41-63; col. 20, lines 5-10 and figure 17].

Regarding to claim 8, Mohan discloses further comprising the step of displaying

the calculated price of the product [...out put device 160, and display device 1710; see

col. 6, lines 37-40; col. 18, lines 50-54 and figures 1 and 17].

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Regarding to claim 9, Mohan discloses further comprising the step of generating a running total of prices for a plurality of products as part of a single transaction [see col. 18, lines 50-54, col. 19, lines 52-56 and figures 1 and 17].

Regarding to claim 10, Mohan discloses further comprising the step of printing the running total upon completing of the transaction [see col. 18, lines 50-54; col. 19, lines 52-56 and figure 17].

Regarding to claim 11, Mohan discloses further comprising the step of categorizing the product within one of a plurality of weight ranges, the price of the product being a function of the weight ranges [see col. 17, lines 34-49, col. 18, lines 55-58; figures 15 and 17].

Conclusion

3.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4.   The US patents to Novak discloses an automated check-out system which digital image processing techniques and technology are used to identify the items by taking a digitized image of the object, and to Espy discloses a price determination system and method using digitized gray-scale image recognition and price lookup files, and to Hansen discloses method and apparatus for object recognition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy-Vi Nguyen whose telephone number is 571-270-

1614. The examiner can normally be reached on Monday through Thursday from 8:30
A.M to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Terrence Till can be reached on 571-272-1280. The fax phone number for
the organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terrence R Till/

Supervisory Patent Examiner, Art Unit 4175

/T. N./